(c) whether ISRO has developed an SOS system for the fishermen facing emergency while in the sea; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) Yes, Sir.

(b) ISRO, as a memebr of the 'International Charter, Space and Major Disasters'; and the 'Sentinel Asia' Project (launched under the Asia-Pacific Region Space Agency; Forum in October 2005), offers disaster management support in the Asia-Pacific region. While only the satellite data, based on specific requests, is provided for disaster events under the International Charter; the 'Sentinel Asia' project envisages providing satellite data as well as capacity building support for the less developed countries of the Asia-Pacific region, for disaster management purposes.

(c) Yes, Sir.

(d) ISRO has developed a satellite based Distress Alert Transmitter (DAT) for safety of fishermen in deep seas, making use of the Data Relay Transponder (DRT) payload on-board the INSAT-3A satellite. The system has a coverage over Indian Ocean, covering areas from Western Australia up to Eastern Africa.

Amount allocated for space programmes

3370. SHRI S. ANBALAGAN: Will the PRIME MINISTER be pleased to state:

(a) the amount allocated and spent for space programmes in the country during the last three years, year-wise;

(b) the achievements made in the form of successful missions/launches and the benefits accrued to the country as a result of each of those missions;

(c) the failed missions/launches during the period alongwith the loss incurred thereon;

(d) whether Government proposes to take any steps to make space establishments self earning; and

(e) if so, the details thereof?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) The amount allocated and spent for space programmes during the last three years is as below:

(Rs. in Crore)

	Final allocation as per RE	Actual amount Spent
2005-06	2675.52	2667.60
2006-07	2997.29	2988.66
2007-08	3290.09	Expected to be fully spent.

(b) The successful Mission/launches during 2005-08 and their benefits are as below:

Mission		Benefit
PSLV C6/Cartosat-1/HAMSAT	:	(i) Mapping of the country for Cartographic applications including land and water resources development. **(Cartosat-1)**
		(ii) Experimental Amateur Radio Communications. **(Hamsat)**
INSAT-4A	:	High power Communication Satellite Services including DTH and providing connectivity across all States.
PSLV C7/Cartosat-2/SRE-1	:	(i) High resolution mapping of the country for cartographic applications. **(Cartosat-2)**
		(ii) Development and validation of the re-entry/ recovery technologies of relevance for future Launch Vehicles development. **(SRE-1)**
INSAT-4B	:	High power Communication Satellite Services including DTH and providing connectivity across all States.
PSLV C8/AGILE/AAM	:	(i) Development and validation of advanced avionic module for launch vehicles. **(AAM)**
		(ii) Commercial Launch. **(AGILE)**
GSLV F04/INSAT-4 CR	:	High Power Communication Satellite Services including DTH and providing connectivity across all States.
PSLV C10/TECSAR	:	Commercial Launch

(c) GSLV F02 mission launched on 10th July, 2006 failed to orbit the INSAT-4C satellite due to anomalous performance of one of the strapon liquid stages. The estimated cost of GSLV F2 was Rs. 150 crores and that of INSAT-4C was Rs. 95 crores. A Failure Analysis Committee has reviewed the causes of failure and suggested measures such as additional inspection procedures, additional testing, etc., which have been incorporated and the subsequent flight of GSLV F04 conducted on 2nd September, 2007 successfully launched INSAT-4CR into orbit.

(d) and (e) No, Sir. The activities of Department of Space and its constituent units (space establishments) are mainly to carry out research and development in the areas of space science, technology and applications. The Receipts of the Department from leasing of transponders of INSAT system, sale of IRS data, etc., are credited to Government Accounts.

Land acquired by housing boards and development authorities

3371. SHRIMATI VIPLOVE THAKUR: Will the Minister of URBAN DEVELOPMENT be pleased to state:

(a) whether Government has examined the legality of the land acquired by housing boards, development authorities in public interest and/or purchased at cheap prices from farmers, etc. and sold at market rates, the task otherwise being done by property dealers/builders;